CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM

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M157 Long-tailed Weasel Mustela frenata

Family: Mustelidae Order: Carnivora Class: Mammalia

Written by: G. Ahlbron Reviewed by: M. White Edited by: M. White

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Common to uncommon, permanent resident of most habitats, except xeric brush, shrub, and scrub in the Mojave and Colorado deserts (Grinnell et al. 1937). Mostly uses intermediate cover stages of conifer and deciduous habitats, interspersed with lower seral stages and open forest, woodland areas and shrubs, from sea level to alpine meadows.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Long-tailed weasels are carnivorous. They eat small mammals, such as mice, gophers, chipmunks, ground squirrels, and rabbits. They also take birds, some insects, salamanders, and small amounts of fruit. Foraging occurs on ground, among rocks, in snags, stumps, logs, wood piles, in brush, and occasionally in trees. Search along runways and in burrows of prey. Hunt day and night, searching, pursuing, and then killing by biting prey at base of skull.

Cover: Small cavities in the ground, rock areas, logs, snags, stumps, and burrows of prey and other mammals are used for cover.

Reproduction: Nests often located in burrows of chipmunks, ground squirrels, gophers, moles, or mountain beavers. Also nest in cavities in trees, snags, logs, and under rocks or human structures.

Water: Probably require drinking water, but little information available on water needs (Hall 1951).

Pattern: Long-tailed weasels use a mixture of intermediate cover stages of conifer and deciduous habitats for breeding, and lower successional stages and open forest, woodland, and shrub habitats for feeding.

SPECIES LIFE HISTORY

Activity Patterns: Active yearlong; nocturnal and diurnal.

Seasonal Movements/Migration: Non-migratory.

Home Range: Little information available; males probably have larger home ranges than females. Quick (1951) and Burt and Grossenheider (1976) suggested home ranges of 10-20 ha (25-50 ac). In good habitat, average density may be 1 weasel/km² (2.6/mi²), with a maximum of about 7/km² (18/mi²). In eastern Oregon, the suggested minimum area required by a pair of long-tailed weasels is approximately 259 ha (640 ac).

Territory: No information found; may be territorial.

Reproduction: Mate in July or August. Gestation period averages 279 days, and ranges from 205-377 days, including delayed implantation. Embryos implant 27 days before birth. Most young born in April or May. One litter of 4-9/yr; both parents care for young. Young begin to eat meat at 21-25 days, and are weaned at about 35 days. Females become mature sexually at 3 mo, and are bred during their first summer estrus. Males mature sexually at 10-11 mo, during the onset of the spring molt (Wright 1947, 1948, Hall 1951).

Niche: Long-tailed weasel populations respond to small mammal population numbers. They are major predators of voles and mice, and they, themselves are preyed upon occasionally by minks, martens, fishers, bobcats, coyotes, red foxes, and gray foxes. Molt to a white winter pelage in areas where deep snow is common. Hensley and Fisher (1975) found major increases in long-tailed weasel numbers when gray foxes were controlled intensively, and Powell (1973) suggested that raptors sometimes control weasel numbers. Tolerant of most human activities.

REFERENCES

- Burt, W. H., and R. P. Grossenheider. 1976. A field guide to the mammals. 3d ed. Houghton Mifflin Co, Boston, MA. 289pp.
- Grinnell, J., J. S. Dixon, and J. M. Linsdale. 1937. Fur-bearing mammals of California. 2 Vols. Univ. California Press, Berkeley. 777pp.
- Haley, D. 1975. Sleek and savage: North America's weasel family. Pacific Search Books, Seattle, WA. 128pp.
- Hall, E. R. 1951. American weasels. Univ. Kansas Mus. Nat. Hist. Vol. 4. 466pp.
- Hensley, M. S., and J. E. Fisher. 1975. Effects of intensive gray fox control on population dynamics of rodents and sympatric carnivores. Southeast. Assoc. Game and Fish Comm. Procs. 29:694-705.
- Newberry, D. W. 1973a. A contribution towards a bibliography of California furbearers. Calif. Dept. Fish and Game, Spec. Wildl. Invest., Sacramento. 148pp.
- Powell, R. A. 1973. A model for raptor predation on weasels. J. Mammal. 54:259-263.
- Quick, H. F. 1951. Notes on the ecology of weasels in Gunnison County, Colorado. J. Mammal. 32:281-290.
- Wright, P. L. 1947. The sexual cycle of the male long-tailed weasel (Mustela frenata). J. Mammal. 28:343-352.
- Wright, P. L. 1948. Breeding habits of captive long-tailed weasels (Mustela frenata). Amer Midl. Nat. 39:338-344.